



DoD Global Influenza and Other Respiratory Viral Pathogens Week 14 (3 Apr – 9 Apr) Weekly Surveillance Report



NEW ISOLATES COLLECTED IN WEEK 14: 1 Influenza A, 0 Influenza B

In addition, 1 influenza A and 6 influenza B isolates were newly identified during Week 14, but were collected prior to that week. For results from individual bases, click [here](#).

SUMMARY:

Overall Results

Since 3 October 2004, the Epidemiological Surveillance Division (AFIOH/SDE) has processed 2664 specimens as part of the influenza surveillance program. Of those specimens, 722 (27%) were positive for influenza A, and 153 (6%) were positive for influenza B. In addition, 85 specimens are still being processed. Click [here](#) for a graph of influenza positives (number and percentage) by week.

For a table of specimens submitted by individual sentinel sites, click [here](#).

Besides influenza A and B, the AFIOH lab also tests specimens for adenovirus, HSV, RSV, enterovirus, and parainfluenza pathogens. In the current week's samples, only influenza A and B were found. For viral results by week, click [here](#). Viral results are also broken down by [MAJCOM](#); counts include specimens collected prior to the current week.

Subtyping

Since 3 October 2004, we have [subtyped](#) 565 isolates using either polymerase chain reaction (PCR) or hemagglutination-inhibition (HI): 468 are Influenza A/H3N2, 16 are Influenza B/Hong Kong, and 81 are Influenza B/Shanghai.

Age/Military Status

Overall, Influenza A seems to be dominating all [age](#) and [military status](#) categories in this flu season.

Influenza-like Illness (ILI) Rates

According to ESSENCE, [ILI rates](#) this week continue to decrease for the overall Global Military Health System.

Locations

- Click the following links for cumulative influenza results by sentinel site: [CONUS](#), [OCONUS](#)
- Results for individual bases and CDC regions can be found on the AFIOH Influenza Surveillance website: <https://gumbo.brooks.af.mil/pestilence/Influenza/>

COMMENTS ON CURRENT TRENDS: Influenza activity continues to decrease steadily among sentinel sites, and the CDC is reporting a continued decrease in activity as well. European countries are reporting declining or baseline levels of activity. Japan reports similar decreasing trends. There continues to be a relatively larger proportion of influenza B isolates later in the season, both from CONUS and overseas sites; this trend has also been noted in Europe, Canada, and Japan. Notably, the B isolates have been subtyped as Shanghai, so the question of vaccine mismatch is less of a concern. All recent influenza A isolates have been sequenced as similar to the California strain, as per our molecular laboratory at AFIOH.

DoD-GEIS continues to monitor the status of U.S. bases in South Korea; due to news reports of avian influenza outbreaks in North Korean chicken flocks. To date, there is no indication that U.S. personnel in South Korea have been affected. Respiratory counts on ESSENCE and specimen submissions to AFIOH from South Korean sites have remained low.

ILI rates for the whole Pacific Rim region (taken from ESSENCE) continues to show a delayed decrease compared to other regions of the world; however, our laboratory has not isolated a larger number of positives from the Pacific Rim compared to other regions. Osan AB ILI rates rose in the past week. AFIOH has made inquiries to Osan PH to confirm this increase and to send specimens if needed. AFIOH will continue to monitor Asian sites and will provide information as available.

NATIONAL INFLUENZA ACTIVITY: CDC

<http://www.cdc.gov/ncidod/diseases/flu/weeklychoice.htm>

During week 13 (the latest report available), CDC reported continued decreasing influenza activity; the flu epidemic this year seems to have peaked in early February. Laboratory surveillance identified 239 specimens (11.2%) positive for influenza. Of these, 12 were influenza A (H3N2), 114 were influenza A viruses that were not subtyped, and 113 were influenza B. One state reported widespread influenza activity; 10 states reported regional activity; 22 states reported local activity; and 15 states, the District of Columbia, New York City, and Puerto Rico reported sporadic activity. Alabama reported no activity.

INTERNATIONAL INFLUENZA ACTIVITY: WHO

<http://www.who.int/GlobalAtlas/DataQuery/home.asp>

Week in review: **Weeks 13-14**

South America: Brazil reported sporadic activity.

Asia: China and Israel reported sporadic activity.

Europe: Belarus, France, Greece, Italy, Portugal, Spain, and Switzerland reported sporadic activity. Finland and Ukraine reported local outbreaks. Latvia and Sweden reported regional outbreaks. Norway reported a widespread outbreak.

North America: The United States reported local outbreaks, and Mexico reported sporadic activity.

Africa: Tunisia reported sporadic activity.

Note: WHO review has been expanded to the previous 2 weeks in order to capture delayed reports from countries.

ADDITIONAL INFORMATION:

Influenza A/H2N2 Strain found in U.S. Laboratories:

The CDC learned on 8 April that influenza test kits distributed by several U.S. providers contained an influenza strain (A/H2N2) similar to the 1957 pandemic strain. Kits were sent to laboratories in the U.S. and 17 other countries for quality control purposes. Today's population has little or no immunity to this strain, as it has not been included in the flu vaccine since the 1960s. Though risk is minimal, concerns have been raised regarding a possible pandemic. No recent H2N2 infections have been reported to date. CDC, HHS, and WHO have recommended that laboratories destroy the H2N2 samples immediately. The AFIOH laboratory has retrieved all H2N2 samples it had received and has destroyed them.

For more information please see:

<http://www.phppo.cdc.gov/HAN/ArchiveSys/ViewMsgV.asp?AlertNum=00227>

Avian Influenza Update*:

The Ministry of Health in Cambodia has confirmed that an 8-year-old girl died of influenza H5N1 on 7 April. This marks the third known case of avian flu in Cambodia. The girl became ill on 29 March. An investigation was conducted to determine the source of her infection, which is still pending. Human-to-human transmission is unlikely; however, no poultry deaths were seen in the region within the two weeks prior to symptom onset. The investigation is still ongoing.

*As reported by WHO on 12 April 2005. For a full report, please see:

http://www.who.int/csr/don/2005_04_12/en/

Influenza-Associated Pediatric Deaths: During week 13, one pediatric death was reported to the CDC. During the current season, the CDC has reported 26 pediatric deaths related to influenza infection from 13 states: California, Colorado, Florida, Georgia, Iowa, Maine, Massachusetts, Mississippi, New Jersey, New York, Ohio, Pennsylvania, and Vermont.

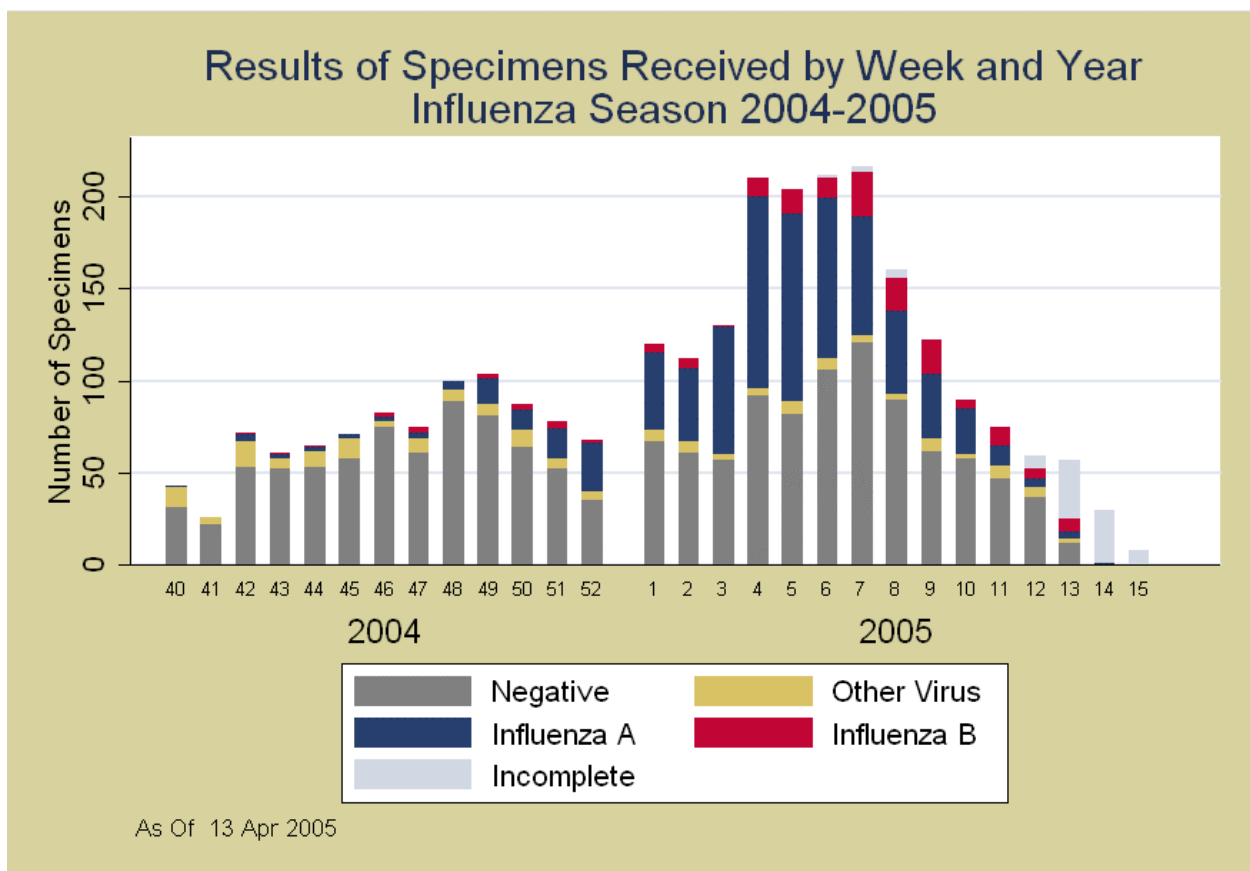
Please direct any questions or comments to: influenza@brooks.af.mil

Table 1: Newly Identified Influenza Specimens this Week, by Base

Site Name	Influenza A		Influenza B	
	New*	Old**	New*	Old**
NAB Little Creek, VA				2
Scott AFB, IL				1
Yokota AFB, Japan	1			3

*New: newly identified and collected during current week

**Old: newly identified, but collected prior to current week

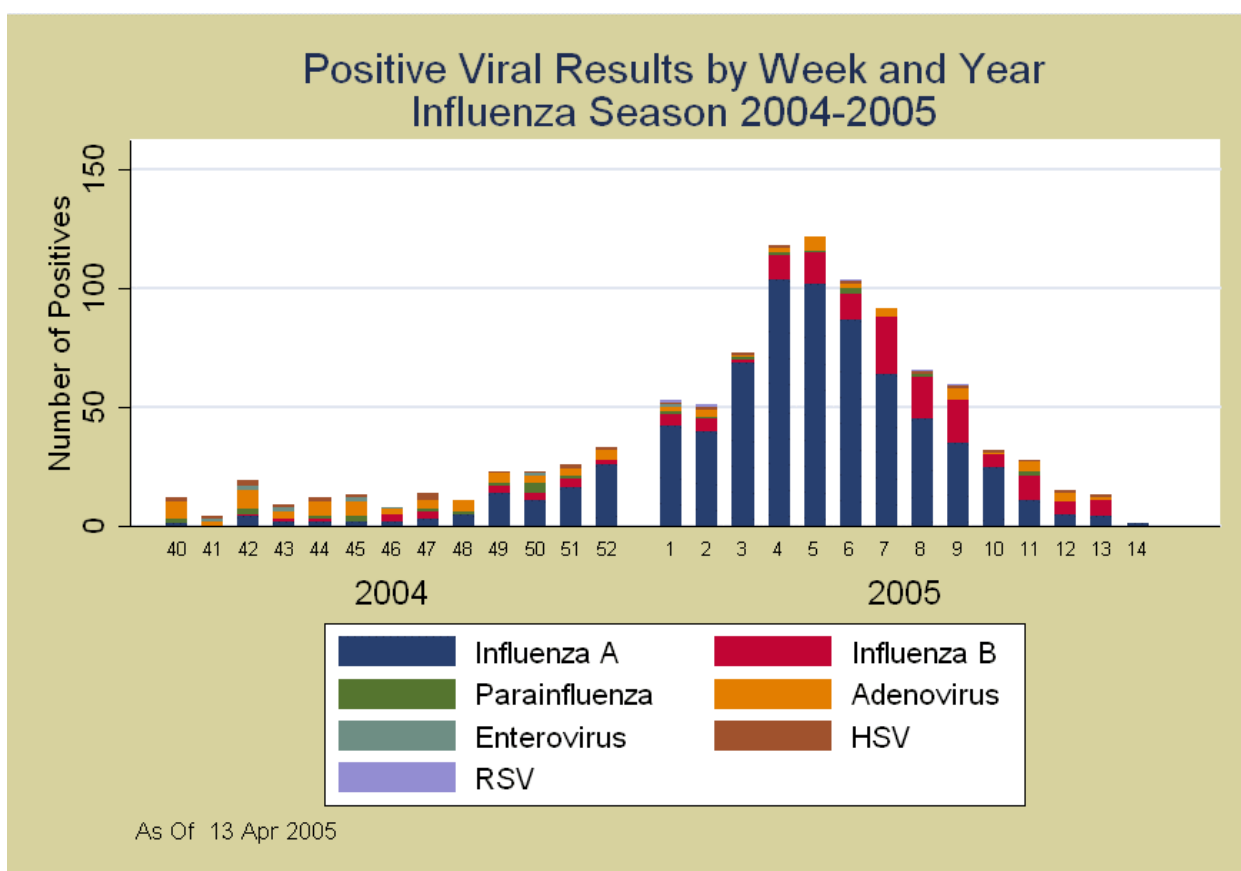


Tables 2 and 3: Respiratory Specimens Submitted by Sentinel Sites, and by Overseas Laboratories since October 3, 2004 (including Incomplete Processing)

AETC	Specimens Submitted
Maxwell AFB, AL	65
Sheppard AFB, TX	227
AMC	Specimens Submitted
Andrews AFB, MD	10
Travis AFB, CA	27
McGuire AFB, NJ	117
Scott AFB, IL	411
CENTCOM	Specimens Submitted
Ganci AB, Kyrg	0
Al Udeid AB, Qatar	12
Balad AB, Iraq	25
PACAF	Specimens Submitted
Hickam AFB/NS Pearl Harbor, HI	0
Kadena AB, Japan	1
Kunsan AB, Korea	9
Andersen AFB, Guam	13
Yokota AB, Japan	63
Misawa AB, Japan	52
Osan AB, Korea	30
Elmendorf AFB, AK	48
USAFA	Specimens Submitted
US Air Force Academy, CO	61

USAFE	Specimens Submitted
Incirlik AB, Turkey	21
Aviano AB, Italy	42
Ramstein AB, Germany	73
RAF Lakenheath, UK	276
ARMY	Specimens Submitted
Landstuhl RMC, Germany	47
Tripler AMC, HI	43
COAST GUARD	Specimens Submitted
CGS Ketchikan, AK	0
NAVY	Specimens Submitted
NMC San Diego, CA	5
NH Yokosuka, Japan	31
Bremerton NS, WA	13
NAB Little Creek, VA	77
<i>TOTAL for SENTINEL SITES</i>	<i>1799</i>

OVERSEAS LAB	Specimens Submitted
AFRIMS, Thailand	0
AFRIMS, Nepal	0
Nicaragua	0
NMRC-D, Peru	363
<i>TOTAL for OVERSEAS LABS</i>	<i>363</i>



Note: Graphs do not include data from the NHRC, which conducts Febrile Respiratory Illness (FRI) surveillance among recruit populations. NHRC compiles this data into a separate report. For more information, visit the NHRC website at <http://www.nhrc.navy.mil/geis/>

Table 4. Summary of Recently Processed Specimens from All Sites

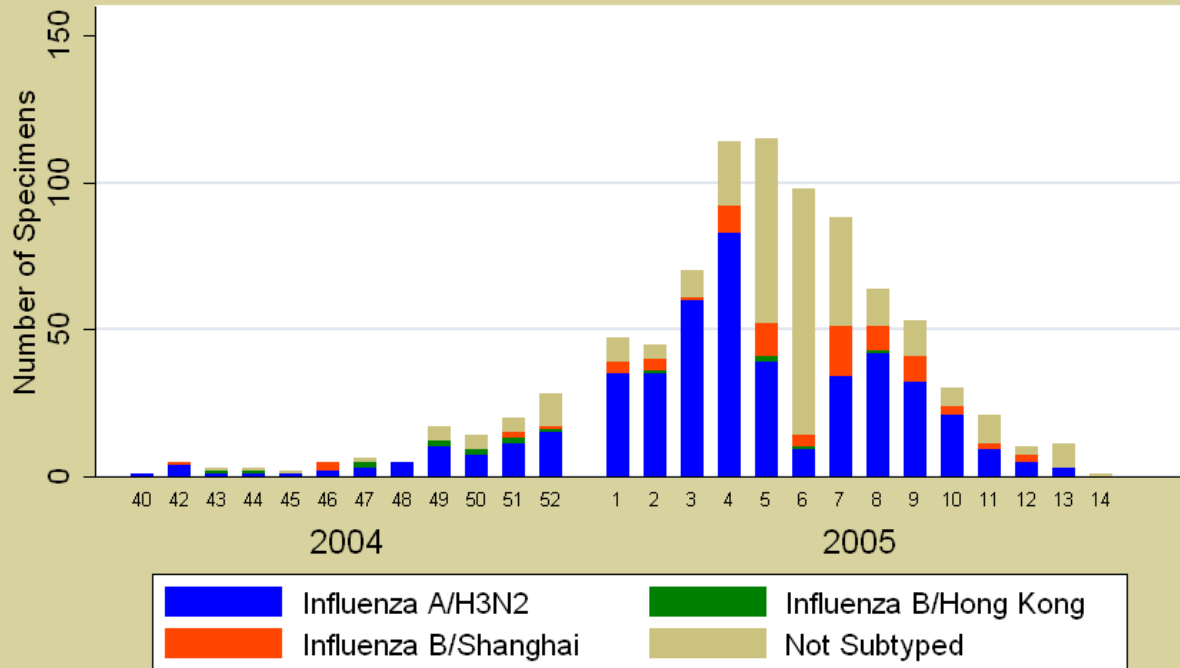
This table includes specimens collected prior to the current week, so results may not match the above graph.

Location	Results of Specimens Processed during current week*				
	Negative	Influenza A	Influenza B	Adenovirus	Other
TOTAL	57	69	6	3	2**
NORTH AMERICA	38	43	3	2	0
PACOM	13	3	3	1	2
EUCOM	6	14	0	0	0
CENTCOM	0	1	0	0	0
SOUTH AMERICA	0	8	0	0	0

Comments: * Influenza A and B totals include recent subtyping results.

**2 HSV

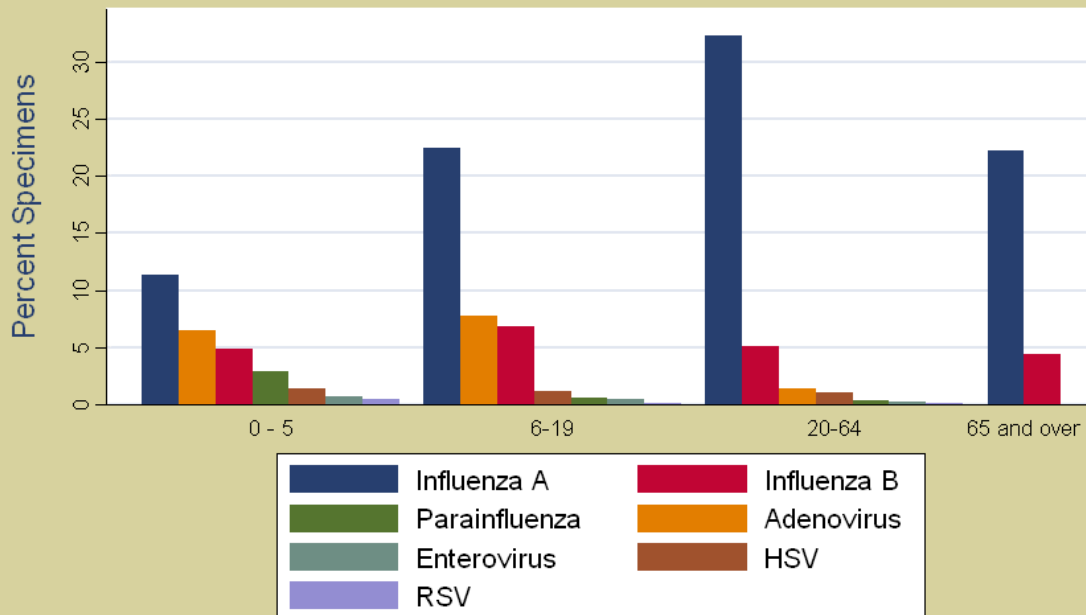
Subtyping Results by Week and Year Influenza Season 2004-2005



As Of 13 Apr 2005

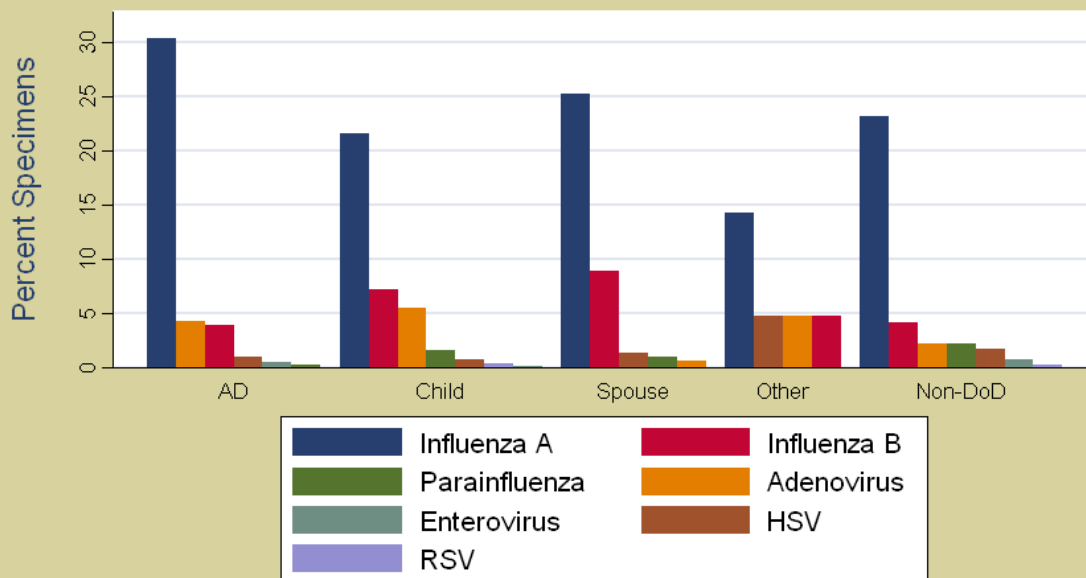
*Subtyping of samples declined in weeks 5-7 due to the heavy workload of the AFIOH laboratory during the flu season's peak. Influenza subtyping is generally performed as the schedule allows.

Percent of Respiratory Virus Submissions by Age Group Influenza Season 2004-2005



As of 13 Apr 2005

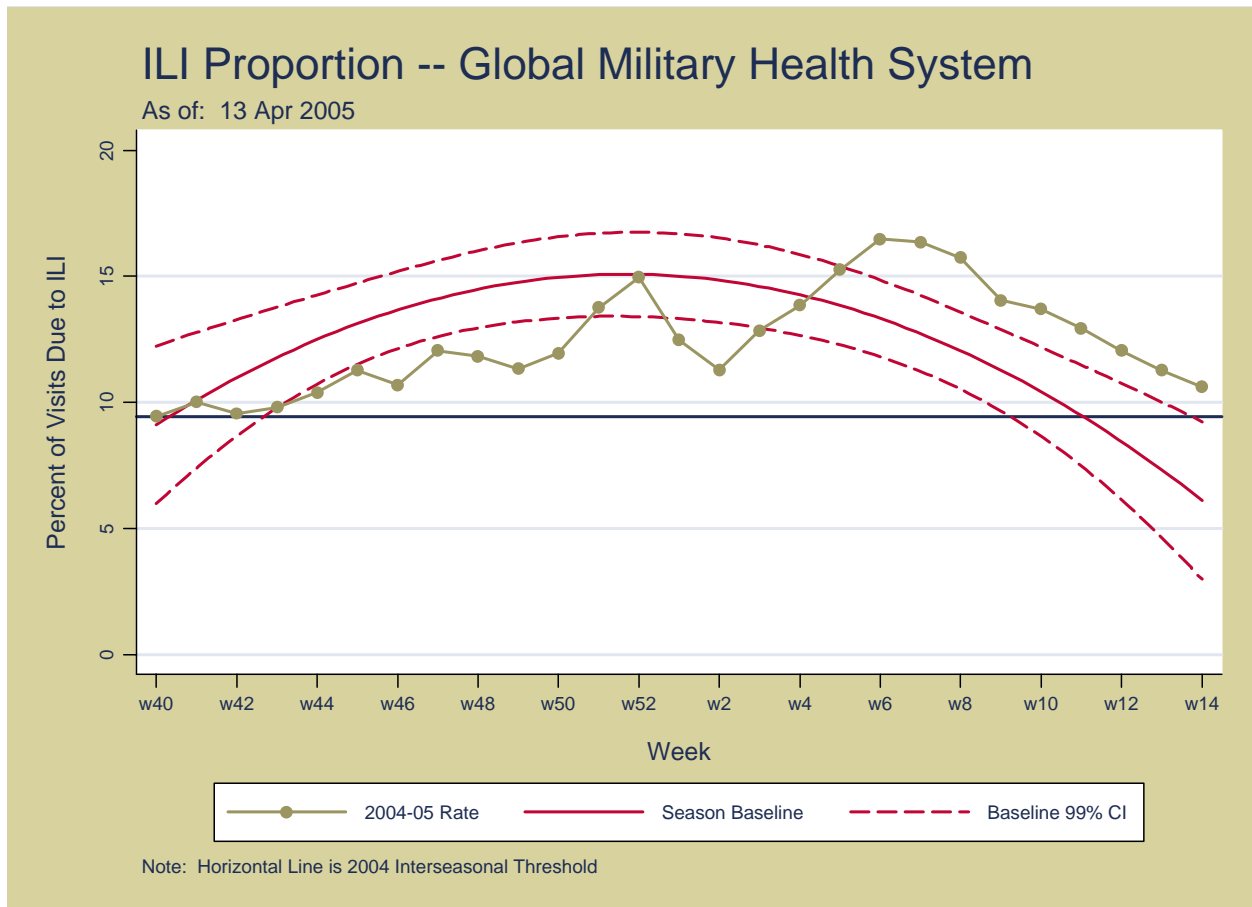
Percent of Respiratory Virus Submissions by Family Military Prefix Influenza Season 2004-2005



As of 13 Apr 2005

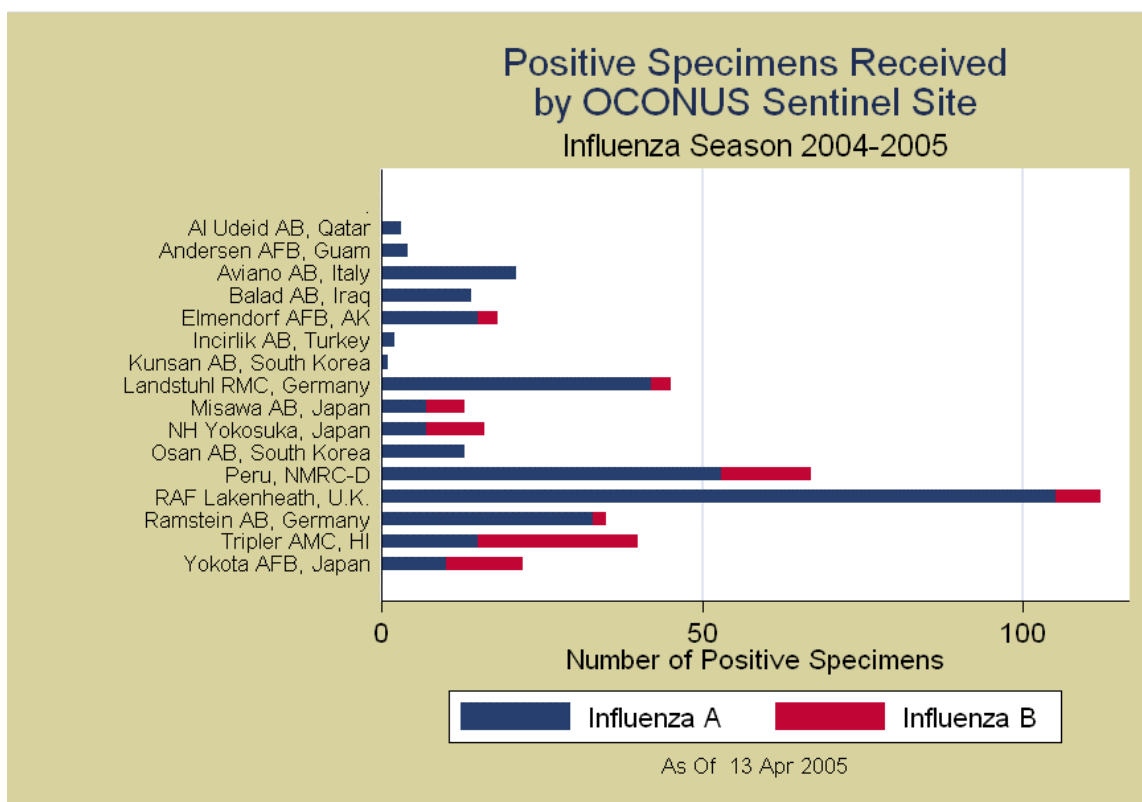
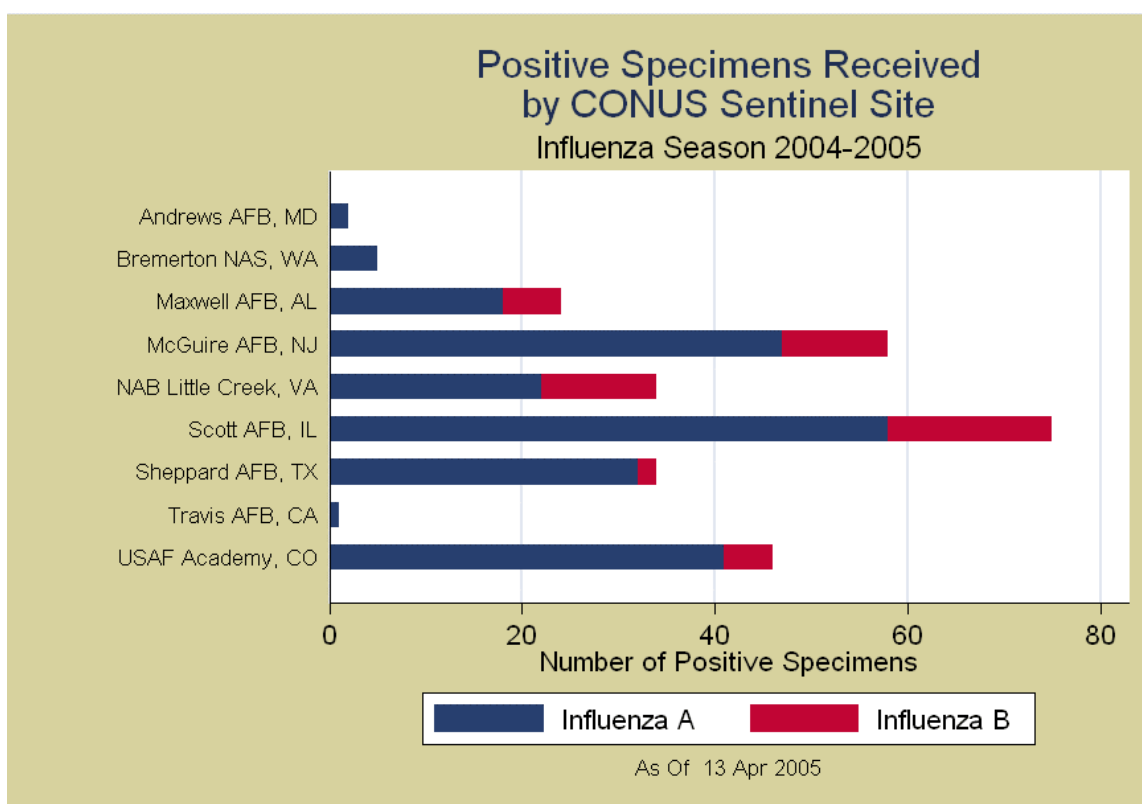
INFLUENZA-LIKE ILLNESS:

This graph plots the percentage of weekly outpatient visits at military installations that had an ICD-9 code correlating with Influenza-Like Illness as defined by ESSENCE. Visit and coding data were taken from ESSENCE. A seasonal baseline and 99% confidence intervals are included for comparison. The baseline was calculated from ESSENCE data for the previous 2 years. Note that the ESSENCE definition for Influenza-Like Illness differs from the CDC definition. See our website for a detailed explanation.



Graphs for individual bases and regions can be found on the AFIOH Influenza Surveillance website:

<https://gumbo.brooks.af.mil/pestilence/Influenza/ILChartsform.cfm>



Numbers and graphs for individual bases can be found on the AFIOH Influenza Surveillance website:
<https://gumbo.brooks.af.mil/pestilence/Influenza/>